

[4910-13-U]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39 [66 FR 8077 1/29/2001]

[Docket No. 2000-NM-184-AD; Amendment 39-12093; AD 2001-02-09]

RIN 2120-AA64

Airworthiness Directives; Boeing Model 757-200 Series Airplanes

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule.

SUMMARY: This amendment supersedes an existing airworthiness directive (AD), applicable to certain Boeing Model 757-200 series airplanes, that currently requires inspections to detect cracking on the free edge of the tang, if necessary, and of the fastener holes in the lower spar chord; and various follow-on actions. That AD also provides for an optional terminating action for the repetitive inspections. This amendment adds inspections to detect additional cracking of the fastener holes in the lower spar chord. This amendment also adds an optional terminating modification. This amendment is prompted by the issuance of new service information. The actions specified by this AD are intended to detect and correct fatigue cracking in the lower spar chord, which could result in reduced structural integrity of the engine strut.

DATES: Effective March 5, 2001.

The incorporation by reference of Boeing Service Bulletin 757-54-0031, Revision 4, dated November 11, 1999, as listed in the regulations, is approved by the Director of the Federal Register as of March 5, 2001.

The incorporation by reference of Boeing Service Bulletin 757-54-0031, Revision 2, dated December 19, 1996, as listed in the regulations, was approved previously by the Director of the Federal Register as of March 28, 1997 (62 FR 11760, March 13, 1997).

ADDRESSES: The service information referenced in this AD may be obtained from Boeing Commercial Airplane Group, P.O. Box 3707, Seattle, Washington 98124-2207. This information may be examined at the Federal Aviation Administration (FAA), Transport Airplane Directorate, Rules Docket, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

FOR FURTHER INFORMATION CONTACT: Dennis Stremick, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2776; fax (425) 227-1181.

SUPPLEMENTARY INFORMATION: A proposal to amend part 39 of the Federal Aviation Regulations (14 CFR part 39) by superseding AD 97-06-04, amendment 39-9961 (62 FR 11760, March 13, 1997), which is applicable to certain Boeing Model 757-200 series airplanes, was published in the **Federal Register** on October 10, 2000 (65 FR 60129). The action proposed to continue to require inspections to detect cracking on the free edge of the tang, if necessary, and of the fastener holes in the lower spar chord; and various follow-on actions. The action also proposed to continue to provide for an optional terminating action for the repetitive inspections. The action also proposed to require additional inspections to detect additional cracking of the fastener holes in the lower spar chord; and to add an optional terminating modification.

Comments

Interested persons have been afforded an opportunity to participate in the making of this amendment. No comments were submitted in response to the proposal or the FAA's determination of the cost to the public.

Conclusion

The FAA has determined that air safety and the public interest require the adoption of the rule as proposed.

Cost Impact

There are approximately 418 Model 757-200 series airplanes of the affected design in the worldwide fleet. The FAA estimates that 151 airplanes of U.S. registry will be affected by this AD.

The inspections that are currently required by AD 97-06-04 take approximately 52 work hours per airplane to accomplish, at an average labor rate of \$60 per work hour. Based on these figures, the cost impact of the currently required actions on U.S. operators is estimated to be \$471,120, or \$3,120 per airplane.

The new inspections that are required in this AD action will take approximately 4 work hours per inspection, per airplane to accomplish, at an average labor rate of \$60 per work hour. Based on these figures, the cost impact of the new requirements of this AD on U.S. operators is estimated to be \$36,240, or \$240 per airplane.

The cost impact figures discussed above are based on assumptions that no operator has yet accomplished any of the requirements of this AD action, and that no operator would accomplish those actions in the future if this AD were not adopted. The cost impact figures discussed in AD rulemaking actions represent only the time necessary to perform the specific actions actually required by the AD. These figures typically do not include incidental costs, such as the time required to gain access and close up, planning time, or time necessitated by other administrative actions.

Regulatory Impact

The regulations adopted herein will not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government. Therefore, it is determined that this final rule does not have federalism implications under Executive Order 13132.

For the reasons discussed above, I certify that this action (1) is not a "significant regulatory action" under Executive Order 12866; (2) is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and (3) will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act. A final evaluation has been prepared for this action and it is contained in the Rules Docket. A copy of it may be obtained from the Rules Docket at the location provided under the caption "ADDRESSES."

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration amends part 39 of the Federal Aviation Regulations (14 CFR part 39) as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. Section 39.13 is amended by removing amendment 39-9961 (62 FR 11760, March 13, 1997), and by adding a new airworthiness directive (AD), amendment 39-12093, to read as follows:

AIRWORTHINESS DIRECTIVE



Aircraft Certification Service
Washington, DC

U.S. Department
of Transportation
**Federal Aviation
Administration**

We post ADs on the internet at "av-info.faa.gov"

The following Airworthiness Directive issued by the Federal Aviation Administration in accordance with the provisions of Title 14 of the Code of Federal Regulations (14 CFR) part 39, applies to an aircraft model of which our records indicate you may be the registered owner. Airworthiness Directives affect aviation safety and are regulations which require immediate attention. You are cautioned that no person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of the Airworthiness Directive (reference 14 CFR part 39, subpart 39.3).

2001-02-09 BOEING: Amendment 39-12093. Docket 2000-NM-184-AD. Supersedes AD 97-06-04, Amendment 39-9961.

Applicability: Model 757-200 series airplanes having line numbers 1 through 736 inclusive, powered by Rolls Royce engines, certificated in any category.

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (n) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To detect and correct fatigue cracking of the lower spar chord, which could result in reduced structural integrity of the engine strut, accomplish the following:

RESTATEMENT OF REQUIREMENTS OF AD 97-06-04:

Repetitive Inspections

(a) Prior to the accumulation of 15,000 total flight cycles, or within 60 days after March 28, 1997 (the effective date of AD 97-06-04, amendment 39-9961), whichever occurs later: Perform an eddy current inspection to detect cracking on the free edge of the tang, in accordance with the Accomplishment Instructions of Boeing Service Bulletin 757-54-0031, Revision 2, dated December 19, 1996, or Revision 4, dated November 11, 1999. Repeat this inspection thereafter at intervals not to exceed 3,000 flight cycles until the inspection required by paragraph (d) of this AD is accomplished.

NOTE 2: The inspection required by paragraph (a) of this AD need not be performed on airplanes on which the inspection required by paragraph (d) of this AD is performed prior to the compliance time specified in paragraph (a) of this AD.

Follow-On Actions

(b) If any cracking is found during the inspection required by paragraph (a) of this AD, and the cracking is within the limits specified in Boeing Service Bulletin 757-54-0031, Revision 2, dated December 19, 1996, or Revision 4, dated November 11, 1999: Prior to further flight, remove the midchord channels, stop-drill the cracking, and install a repair in accordance with the service bulletin. No further action is required by paragraph (a) of this AD.

(c) If any cracking is found, and the cracking is outside the limits specified in Boeing Service Bulletin 757-54-0031, Revision 2, dated December 19, 1996, or Revision 4, dated November 11, 1999: Prior to further flight, replace the lower spar chord with a new or serviceable chord in accordance with a method approved by the Manager, Seattle Aircraft Certification Office (ACO), FAA.

Bolt Hole Inspection

(d) Perform an eddy current inspection (bolt hole inspection) to detect cracking of the two fastener holes in the lower spar chord, in accordance with the Accomplishment Instructions of Boeing Service Bulletin 757-54-0031, Revision 2, dated December 19, 1996, or Revision 4, dated November 11, 1999, at the time specified in paragraph (d)(1) or (d)(2) of this AD, as applicable. Accomplishment of this inspection terminates the inspections required by paragraph (a) of this AD.

(1) For airplanes on which the stiffening straps have been removed from the midchord in accordance with Boeing Service Bulletin 757-54-0028 prior to the effective date of this AD: Accomplish the inspection at the time specified in Paragraph 1.D. ("Description") of Boeing Service Bulletin 757-54-0031, Revision 2, dated December 19, 1996, or Revision 4, dated November 11, 1999.

(2) For airplanes other than those identified in paragraph (d)(1) of this AD: Accomplish the inspection prior to the accumulation of 18,000 total flight cycles, or within 60 days after March 28, 1997, whichever occurs later.

(e) Accomplish either paragraph (e)(1) or (e)(2) of this AD, as applicable, in accordance with Boeing Service Bulletin 757-54-0031, Revision 2, dated December 19, 1996, or Revision 4, dated November 11, 1999.

(1) If any fastener installed as a result of an inspection required by paragraph (d) of this AD has a diameter of 5/8-inch or greater: Install the repair prior to the accumulation of the number of flight cycles specified in the "Subsequent Inspection Interval" column of the Threshold Table included in Paragraph 1.E. ("Compliance") of Boeing Service Bulletin 757-54-0031, Revision 2, dated December 19, 1996, or Revision 4, dated November 11, 1999.

(2) If any fastener installed as a result of an inspection required by paragraph (d) of this AD has a diameter of less than 5/8-inch: Repeat the bolt hole inspection required by paragraph (d) of this AD prior to the accumulation of the number of flight cycles specified in the "Subsequent Inspection Interval" column of the Threshold Table included in Paragraph 1.E. ("Compliance") of the service bulletin until the repair specified in paragraph (h) of this AD is installed.

Optional Terminating Action

(f) Installation of the repair in accordance with the Accomplishment Instructions of Boeing Service Bulletin 757-54-0031, Revision 2, dated December 19, 1996, or Revision 4, dated November 11, 1999, constitutes terminating action for the requirements in paragraphs (a) and (d) of this AD.

NEW REQUIREMENTS OF THIS AD:

Revised Service Information

(g) Except as provided by paragraphs (c) and (l)(3) of this AD: As of the effective date of this new AD, Boeing Service Bulletin 757-54-0031, Revision 4, dated November 11, 1999, must be used for accomplishment of the actions required by this AD.

Second Bolt Hole Inspection

(h) Within 6,000 flight cycles after accomplishment of paragraph (d) of this AD, or within 60 days after the effective date of this AD, whichever occurs later: Perform a second eddy current inspection (bolt hole inspection) to detect cracking of the two fastener holes in the lower spar chord, in accordance with Part IV of the Accomplishment Instructions of Boeing Service

Bulletin 757-54-0031, Revision 4, dated November 11, 1999. If no cracking is found during the inspection required by this paragraph, no further action is required by this paragraph.

Third Bolt Hole Inspection

(i) After accomplishment of the inspection required by paragraph (h) of this AD, when the airplane has reached the flight cycle threshold as defined by the flight cycle threshold formula on page 9, Paragraph 1.E. ("Compliance") of Boeing Service Bulletin 757-54-0031, Revision 4, dated November 11, 1999: Perform a third eddy current inspection (bolt hole inspection) to detect cracking of the two fastener holes in the lower spar chord, in accordance with Part II of the Accomplishment Instructions of the service bulletin.

Fourth Bolt Hole Inspection

(j) If, after accomplishment of the inspection required by paragraph (i) of this AD, paragraph (m) of this AD has not yet been accomplished: When the airplane has reached the flight cycle threshold as defined by the flight cycle threshold formula on page 9, Paragraph 1.E. ("Compliance") of Boeing Service Bulletin 757-54-0031, Revision 4, dated November 11, 1999; perform a fourth eddy current inspection (bolt hole inspection) to detect cracking of the two fastener holes in the lower spar chord, in accordance with Part II of the Accomplishment Instructions of the service bulletin.

Follow-On Actions

(k) If no cracking is found during any inspection required by paragraph (d), (i), or (j) of this AD, prior to further flight, increase the diameter of the holes by the dimensions specified in the Accomplishment Instructions of Boeing Service Bulletin 757-54-0031, Revision 2, dated December 19, 1996, or Revision 4, dated November 11, 1999, and install new fasteners in accordance with the service bulletin.

(l) If any cracking is found during any inspection required by paragraph (d), (h), (i), or (j) of this AD, prior to further flight, accomplish paragraph (l)(1), (l)(2), or (l)(3) of this AD, as applicable, in accordance with the Accomplishment Instructions of Boeing Service Bulletin 757-54-0031, Revision 2, dated December 19, 1996, or Revision 4, dated November 11, 1999.

(1) If the cracking can be removed by increasing the diameter of the hole in accordance with the service bulletin: Increase the diameter of the hole by the dimensions specified in the Accomplishment Instructions of the service bulletin, and install new fasteners in accordance with the service bulletin.

(2) If the cracking cannot be removed by increasing the diameter of the hole in accordance with the Accomplishment Instructions of the service bulletin, but the cracking is within the limits specified in the service bulletin: Install the repair in accordance with the service bulletin. No further action is required by paragraph (d) of this AD.

(3) If the cracking is outside the limits specified in the service bulletin: Replace the lower spar chord with a new or serviceable chord in accordance with a method approved by the Manager, Seattle ACO.

Optional Terminating Modification

(m) Accomplishment of the modification of the nacelle strut and wing structure as required by AD 99-24-07, amendment 39-11431, constitutes terminating action for the requirements of this AD.

Alternative Methods of Compliance

(n) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Seattle ACO. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Seattle ACO.

NOTE 3: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Seattle ACO.

Special Flight Permits

(o) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Incorporation by Reference

(p) Except as provided by paragraphs (c) and (l)(3) of this AD, the required actions shall be done in accordance with Boeing Service Bulletin 757-54-0031, Revision 2, dated December 19, 1996; or Boeing Service Bulletin 757-54-0031, Revision 4, dated November 11, 1999; as applicable.

(1) The incorporation by reference of Boeing Service Bulletin 757-54-0031, Revision 4, dated November 11, 1999, is approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51.

(2) The incorporation by reference of Boeing Service Bulletin 757-54-0031, Revision 2, dated December 19, 1996, was approved previously by the Director of the Federal Register as of March 28, 1997 (62 FR 11760, March 13, 1997).

(3) Copies may be obtained from Boeing Commercial Airplane Group, P.O. Box 3707, Seattle, Washington 98124-2207. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

Effective Date

(q) This amendment becomes effective on March 5, 2001.

FOR FURTHER INFORMATION CONTACT: Dennis Stremick, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2776; fax (425) 227-1181.

Issued in Renton, Washington, on January 18, 2001.

Dorenda D. Baker, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.